**Best Available Copy** 

ase type a plus sign (+) inside this box

NOV 1 2

PTO/SB/08A (10-96) for use through 10/31/99. OMB 0651-0031 sice: U.S. DEPARTMENT OF COMMERCE Under the Peperwork Reduction Act of 1995, no persons ere required to respond to a collection of information unless it co

Substitute for form 1449A/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet of

Complete if Known				
Application Number	09/422,398			
Filing Date	October 21, 1999			
First Named Inventor	Bruce W. Smith			
Group Art Unit				
Examiner Name	Unknown 285/			
Attorney Docket Number	88405.99R077			

Exemple	or Cite	U.S. Peten	t Document	U.S. PATENT DOC	UMENTS	
Initials	No.1	Number	Kind Code <sup>2</sup> (If known)	Name of Petentee or Applicant of Cited Document	Date of Publication of Cited Document	Peges, Columns, Lines, Where Relevant
##	1	5,627,625		Tohru Ogawa	MM-DD-YYYY	Pessages or Relevant Figures Appear
\$	2	5,638,211		Naomasa Shiraishi	05/06/97	g- co , opean
	3	3,776,633	$\neg$		06/10/97	
$\perp$	4	3,729,252		Albert Frosch, et al	12/04/73	
	5	5,926,257		Clarence N. Nelson	04/24/73	
$\perp$	6	5,631,721		Satoru Mizouchi	07/20/99	
	7	5,673,102	<del></del>	Stuart Stanton, et al.	03/20/97 5 FATT	
HN	8	5,305,054	<del></del>	Akiyoshi Suzuki, et al.	09/30/97	
		-,,	<del></del>	Akiyoshi Suzuki, et al.	04/19/94	
			-+			
			-+-+			
	-					
	$\overline{}$				<del> </del>	
$\overline{}$	-+				<del> </del>	
-	$\overline{}$				<del></del>	
			-		<del></del>	

		T		FOR	EIGN PATENT DOCUMEN	TS		_
Examiner Cite		<del> </del>	Foreign Patent Docur	nent	Name of Patentee or			
	No.1	Office:		Kind Code <sup>5</sup> (if known)	Applicant of Cited Document	Date of Publication of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant	ı
-4-4-1	9	EP	0 503 472 A3	EP	Minori Noguchi	MM-DD-YYYY 09/16/92	Figures Appear	1
+-+	10	EP EP	0 500 393 B1	EP	Akiyoshi Suzuki, et al.	08/26/92		Ļ
	12	_	0 500 393 A3 / 0 486 316 A3 /	EP	Akiyoshi Suzuki, et al.	08/26/92		╀
	13		0 496 891 A1	EP EP	Naomasa Shiraishi	05/20/92		╀
HN	4	EP	0 783 135 A1	EP	Naomasa Shiraishi Akiyoshi Suzuki, et al.	08/05/92		┢
					vikiryosini Suzuki, et al.	07/09/97		E
$\neg +$		$\dashv$				<del></del>		
$\neg$	-1					<del></del>	· · · · · · · · · · · · · · · · · · ·	<u> </u>
								L

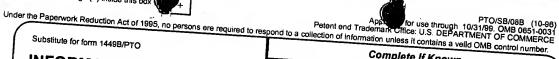
Examiner			
Signature Ngruyen, Hung Henry	Date	10.1.1	
	Considered	12/26/00	7
Considered legislate reference considered, whether or not citation is in conference			Τ

nce considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance end not considered. Include copy of this form with next communication to applicant.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individuel case. Any comments on the emount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

<sup>&</sup>lt;sup>1</sup> Unique citation designation number. See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standerd ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the seriel number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicent is to place e check mark here if English language Translation is attached.

Please type a plus sign (+) inside this box



## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary) of

Contains a veild OMB control number.				
Complete If Known				
Application Number	09/422,398			
Filing Date				
First Named inventor	October 21, 1999			
Group Art Unit	Bruce W. Smith			
Examiner Name	Unknown -2851			
	Unknown			
Attorney Docket Number	88405.99R077			
	00403.99KU//			

	<del>-</del>		2		Unknown	_
	72		<u> </u>	Attorney Docket Number	88405.99R077	_
NOV	5					
Examiner Initials	1	0	THER PRIOR ART NO	ON PATENT LITERATUR		_
Examiner	g Si	Include n	name of the euthor (in CAPITAL	ON PATENT LITERATUR  LETTERS), title of the erticle (wh posium, catalog, etc.), dete, page(set of the end/or counts with the end of the end/or counts with the end of the end/or counts with the end of the end	E DOCUMENTS	_
Ex	J. J.		senel, symp	posium, catalog etc.) dete	en eppropriate), title of the	_
DEMARKO	ィー	S. Asai et al "U	publisher, city	posium, catalog, etc.), dete, page( end/or country where published.	s), volume-issue number(s),	1
Hh)	15	Technology, Vol	B 10(6) pp 3033 Optical L	ithography Using a Same		1
1,,,,	1		- 10(0), pp. 3023-3026, (N	November/December 1992)	s), volume-issue number(s), d Light Source", J. Vac. Sci.	+
	$\top$	E. Tamechiles				ı
HW	16	Illumination" I	al., Investigation of Single	Sidehand Onti- 11		L
טיוי ן	1.0	,	ac. Sci. Technology, Vol.	B 10(6), pp. 3027-3031	ny Using Oblique Incidence	╄
	┼	11.11		Sideband Optical Lithograph B 10(6), pp. 3027-3031, (No	vember/December 1992).	ı
1 HW	17	W.N. Partlow, et a	I., "Depth of Focus and D.		ine and Deep-UV Lithography 1927, pp. 137-156, (1993).	ı
1110	l <sup>17</sup>	Sang Annular Illu	mination", SPIE Optical/I	solution Enhancement for i-l	ine and Deen IN L	L
<u> </u>	<u> </u>			Vol.	1927, pp. 137-156 (1993)	
HN		T. Ogawa, et al., "T	he Effective Liebes	Optimization With the Modil Laser Microlithography, Vo	1-05 (1993).	
্ব শ	18	Depth-of-Focus En	hancements", SPIF Onti-	Optimization With the Modif	fied Board	
<b>  </b>			, or its optical	Optimization With the Modii I Laser Microlithography, Vo	ol. 2197 pp. 19.30 (100.0)	_
$\perp$ $\sim$ $\perp$	$\neg$	T. Ogawa, et al "C.	th Owner 1 to		Super Resolution Technique",	
4N 1	19	SPIE Optical Laser	Microlithography Optical	Lithogrpahy With Process		
<u> </u>	- 1		Vo	ol. 2440, pp. 772-783. (1905)	Super Resolution Technique"	_
	-	R W Smith		(1793)		
HN 2	۱ ،	Microlighography	Illumination Pupil Filtering	g Using Madical		
1 410 12	<u> </u>	B. Verapily A	4, voi. 3334, pp. 37-47, (1	g Using Modified Quadrupol 998).	e Apertures", SPIF Optical	_
	-+		_	•	, == 12 Optical	
1 1	. [:	S.W. Smith, et al., "I	nfluences of Off. Avia III		1	
HN 21	1-	vol. B1	6(6) 3398, pp. 3405-3410	Movember (November (Novemb	erration" I Vac S	
F			,	mination on Optical Lens Ab (November/December 1998)	). , <u>s. vac. Sci.</u>	
	9	hin C. Hsia, et al. "	Customized O.C.	nination Aperture Filtering for LI, Vol. 3679, pp. 39-46, (199	1	
HW 22	12	ithography", SPIE C	ptical Microlithography	nination Aperture Filtering for	or Sub-0-10	
<b> </b>			X X	1, vol. 3679, pp. 39-46, (199	99).	٦
, —	P	Zandbergen et al "	10		1	ı
HN 23	V	ol. 3679, pp. 29-38	(1990) Extension at the 19	93nm Wavelength" Chr. c		-
_ vi ·	-1		().	93nm Wavelength", SPIE Op	otical Microlithography XI.	┨
	+-					1
1	1_					1
HN 24	Z.	Yang, et al., "Correct	tions of Aherrosiana v			1
1110	1	cinational Lens Deis	tions of Aberrations Using sgn Conference, Vol. 1354,	HOE's in UV and Visible Im. pp. 323-327, (1990).	laging System-II Cove	1
1	1			. pp. 323-327, (1990).	Systems", SPIE	ı
	+				1 .	ı
, 1	1				1	1
wal ha	1.					ı
HN 25	B. \	V. Smith, Microlitho	graphy: Science and m		c: Marcel Dekker (1998), pp.	
	~.0	-LJ (.	7. Solence and Techi	nology, Chapter 3, New York	G Marcel Dekkon (1999)	
					Dekker (1998), pp.	
					1 1	
					1 1	

Examiner	New			
Signature  *EXAMINER: Inconsidered. Incl	itial If reference considered, whether or not citation is in con	Date Considered	12/26/00	

<sup>\*</sup>EXAMINER: Initial If reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individuel case. Any comments on the amount of time you ere required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231.

DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

<sup>&</sup>lt;sup>1</sup> Unique citation designation number. <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.